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Scale-Insects of the Date-Palm

Classical Arabic lexicographers describe فَغَّا as 'a dust that comes upon unripe dates, spoiling them and rendering them like the wings of the jundab' (a sp. of locust). They describe غَفَّا as 'a blight incident to palms, like dust falling upon the unripe dates, preventing them from becoming ripe and rendering them tasteless', or 'a thick crust that comes upon unripe dates'. Finally, to explain اغْفَرَ النَّخْلَ, 'the palms had, upon their unripe dates, what resembled a bark or crust, which the people of al-Madinah call غَفَّا'.

These three words, none of which is defined intelligibly to a date-grower, are probably one and the same thing. I suspect that the original is غَفَى, from which فَغَّا would come by metathesis; while اغْفَرَ, an easy mispronunciation of غَفَّى, would easily be ascribed to the root *gafara* = to cover, veil, or conceal.

The original meaning of *gafa* is apparently the chaff of wheat.

There can be no doubt, I think, that these terms all refer to attacks of a scale insect, of which there are two that infest the fruit of the date-palm.

One of these (*Phoenicococcus marlatti*) is flesh-colored, and habitually lives at the base of the leaves, far inside the trunk of the palm, but comes out in migration twice a year or oftener. By sucking the juices out of a developing bunch of dates, it causes a shriveling which at Biskra, Algeria, is now called *khāmij* (i. e., debility), while the insect is there called *armud* (i. e., ash-colored). At Baghdād بَخْصَع describes a palm attacked by this scale, بَخْصَع meaning to butcher or cut meat in pieces, since the insect looks not unlike a tiny piece of raw meat, flattened out.

The other insect (*Parlatoria blanchardi*) is white, and lives on the leaves for the most part. At Baghdād it is now called 'urrah, from its resemblance to the droppings of birds. At Biskra it goes by the name of *subbāh*, which properly describes a salt efflorescence.

The only clue to the identity of the *gafa* is the statement that it looks like the wings of the jundab; this conveys nothing to me, however, for I am not acquainted with that species of

locust. Possibly the term was applied to both species of scale without distinction. From the description of its effects, however, I believe it refers to the Phoenicococcus or so-called Marlatt scale.

As the classical lexicographers usually admitted only words current before Islâm, it may fairly be said that this scale insect has a written history of more than 1300 years. It would be interesting to know whether any other of these minute pests has such a long record in literature.

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The meaning of Babylonian bittu

The Assyro-Babylonian Dictionaries are still doubtful as to the meaning of *bittu*. Delitzsch, *HWB* p. 192 does not give any conjecture at all, while Muss-Arnolt, *ABHWB*, p. 204 notes down "according to Ball, *PSBA* XII, 221, a kind of dress".

Bittu (or also *battu*) is ideographically written *ne-ğar-ra*; *ğar*, according to Delitzsch, *Sum. Glossar*, p. 210, having the meaning "einschränken, einengen", *ramâṣu*, "einfassen". *Ne-ğar-ra* is an active participle with prefix *ne* and affix *a* (see Delitzsch, *Sum. Gram.* p. 123) and therefore means "das Einengende, das Umfassende", which, of course, at the first thought would be the girdle. That this is really the case, and that the meaning of *bittu*, *battu* is "girdle, belt", becomes clear when we consider similar words in the cognate languages. *Bittu*, first of all, is a contraction with reduplicated *t*, going back to *bintu* or *bantu*. *Bantu* equals Egyptian *bnt*, "girdle", and Hebrew בַּנְבָנָה with the same meaning, although here it is generally the "priestly girdle".

The Hebrew and the Egyptian words have often been compared with our own "band", German "Binde, Band", but these words are certainly not borrowings from Indo-European; they are purely Semitic.

The primary meaning of the stem *בַּנְבָנָה seems to be "to encircle, to be all around" and this meaning is preserved in the Babylonian adverb *battubatti*, *battibatti*, *battabatta*, which is a reduplication of *bantu*, and has the meaning "circle", "all